
SHORT NOTES

Observations of Turtles and Birds on Bare Sand Island

Bare Sand Island (12° 32' S, 130° 25' E) lies 80 km to the west of Darwin, and is approximately 19 ha in area. It is a well-known destination for members of Darwin's yachting community who regularly overnight on the island during the dry season (May to October) when trade winds are from the south east. Many visitors to the island have reported turtle nesting and have sighted either adult turtles ashore at night, or hatchlings on the beach. The island is mentioned by Mr. Hugh Christie (Fry 1913: *Rec. Aust. Mus.* 10, 159-85) who at one time manned the lighthouse at Charles Point, as a near year-round nesting locality for the Flatback Sea-turtle, *Nator depressus*. In view of the published and anecdotal reports, we visited Bare Sand Island on 16 December 1989, for 24 hours to document the extent of sea turtle nesting.

After an initial walk around the island, we concluded that there had been no nesting by sea-turtles for some weeks and possibly, even months. There was no sign of turtle tracks, or recently hatched nests, both of which leave characteristic depressions in the sand. However we found the remains of turtle egg shells of past seasons exposed by the erosion of the dunes by wind and waves. The estimated diameter of the eggs (52 mm), and their depth of burial (50 cm) indicated that Flatbacks were responsible. The presence of Flatbacks was established when the carcass of a hatchling, minus the head and limbs, was found at the base of the lone tree. As the remains of fish accompanied the hatchling it is assumed that the turtle was carried there by a predatory bird.

Birds were abundant on the island. Species with the largest numbers were Crested Terns *Sterna bergii* (1,000), Lesser Frigatebird *Fregata ariel* (100), and Black-naped Tern *Sterna sumatrana* (40). The nests of Black-naped Terns were common in bomb craters on the western side of the island. These craters, in which the remains of twisted steel and shrapnel were found, were evidence that the island had been heavily bombed at some time in the past. The only previously known breeding sites of the Black-naped Tern in Northern Territory waters are to the east of Darwin (Cobourg Peninsula and Gove), so the Bare Sand Island rookery represents a new breeding locality (H. Thompson, pers. comm.). A low spreading shrub supported numerous nests of Reef Herons *Egretta sacra*. Twelve adults and eight recently-fledged juveniles were counted, including both white and dark colour phases. Only three nests contained chicks (Plate 1). Other birds observed on the island, and their approximate numbers, were as follows: Australian Pelican *Pelicanus conspicillatus* (30), Brown Gannet *Sula leucogaster* (1), Brahminy Kite *Haliastur indus* (2), White-breasted Sea-eagle *Haliaeetus leucogaster* (2), Beach Thick-knee *Burhinus neglectus* (2), Sooty Oystercatcher *Haematopus fuliginosus* (2), Silver Gull *Larus novaehollandiae* (6).



PLATE 4 *Young Reef Herons in nest on Bare Sand Island (P. Ryan)*

Bare Sand Island is an interesting locality for beach-combing as a good variety of shells and the tests of large sand dollars are plentiful along the shore. Inland the partially fossilised tests of heart urchins and shells are abundant in the craters along the western coast. The area including Bare Sand Island is presently under the Kenbi Land Claim by the Larrakeyah people. What ever the outcome it is hoped that access to the island will not be denied by either the traditional owners or leaseholder.

MICHAEL L. GUINEA and PAUL RYAN, *Faculty of Science, Northern Territory University, P. O. Box 40146, Casuarina NT 0811.*

Notes on Reproduction in the Skink *Sphenomorphus darwiniensis*

Sphenomorphus darwiniensis, a skink endemic to the Top End of the Northern Territory and the northern Kimberley of Western Australia (see Storr 1967 and Storr *et al.*, 1981) has been inferred to be reproductively active during the Wet Season, and quiescent during the Dry (James & Shine 1985, as *S. crassicaudus*). This inference was based on seven adult males and five adult females. However, only one female was actually reproductively active; it measured 52 mm in snout-vent length (SVL), had a clutch size of five and was collected in January (James 1983, as *S. crassicaudus*). The mode of reproduction was implied ("clutch size"),